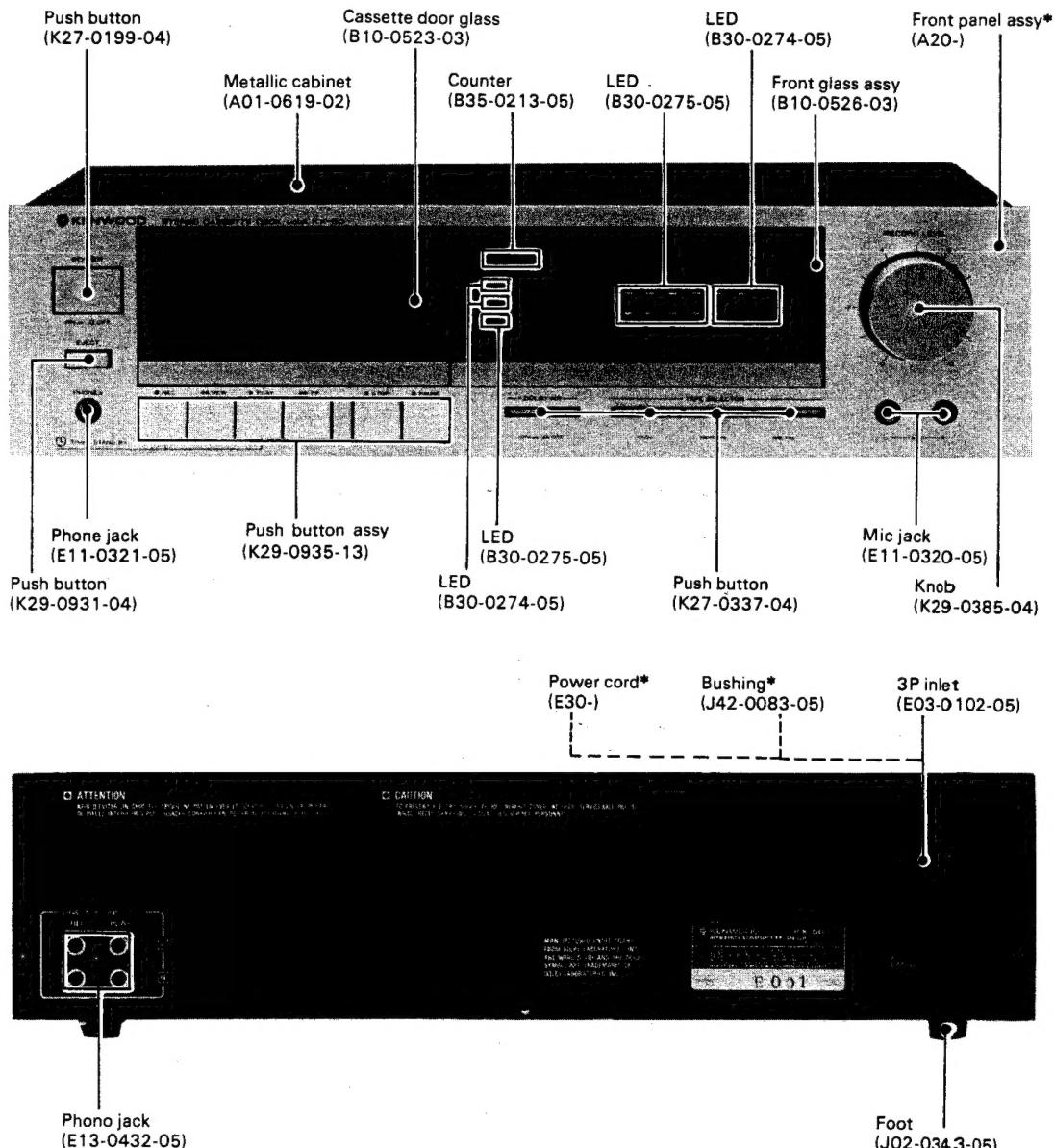


SERVICE MANUAL

KENWOOD®

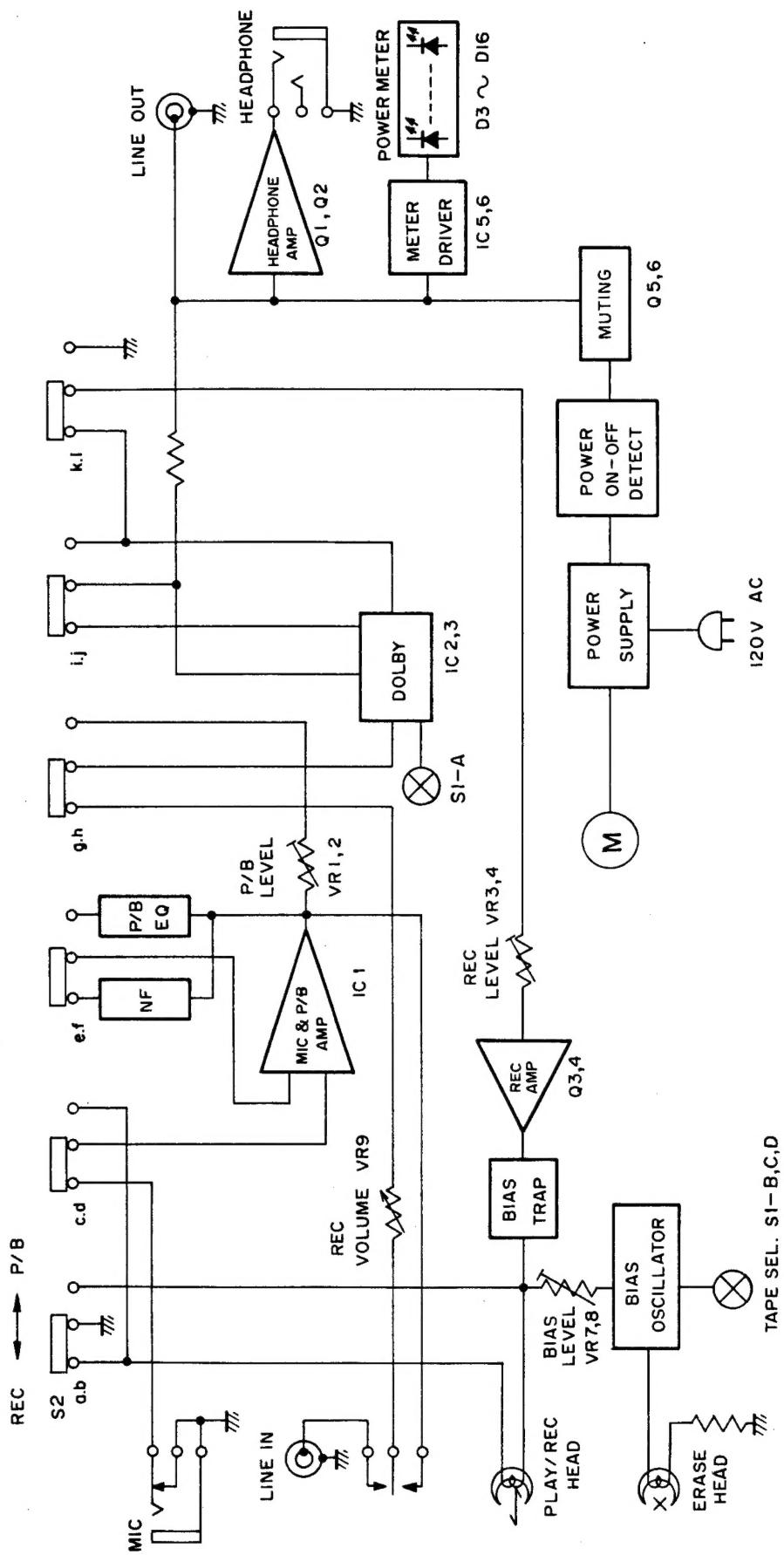
KK-50

STEREO CASSETTE DECK



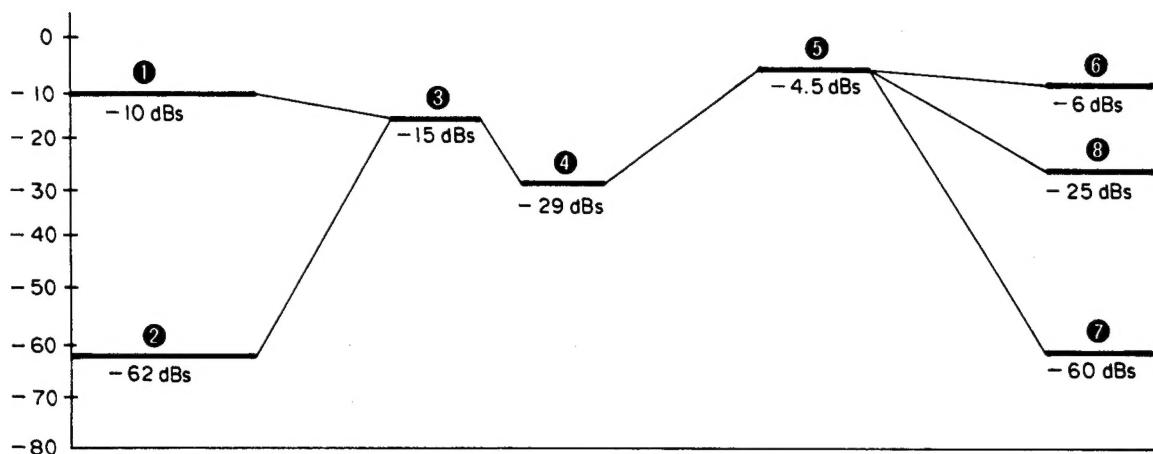
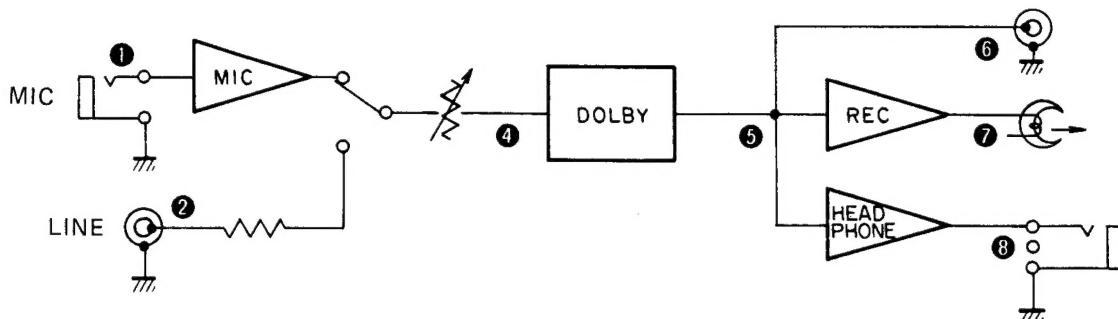
*Refer to parts list on page 10.

BLOCK DIAGRAM

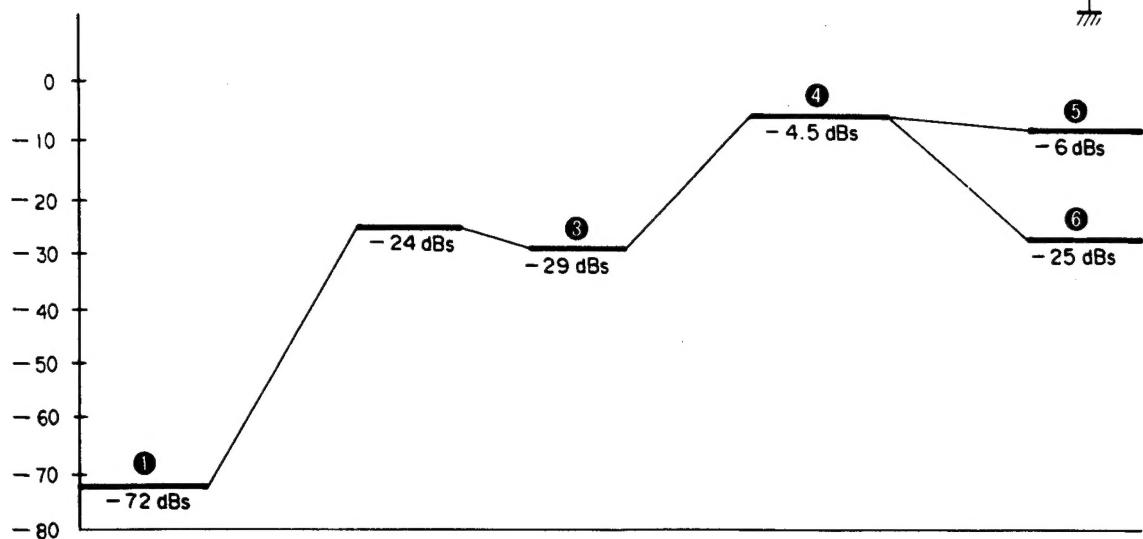
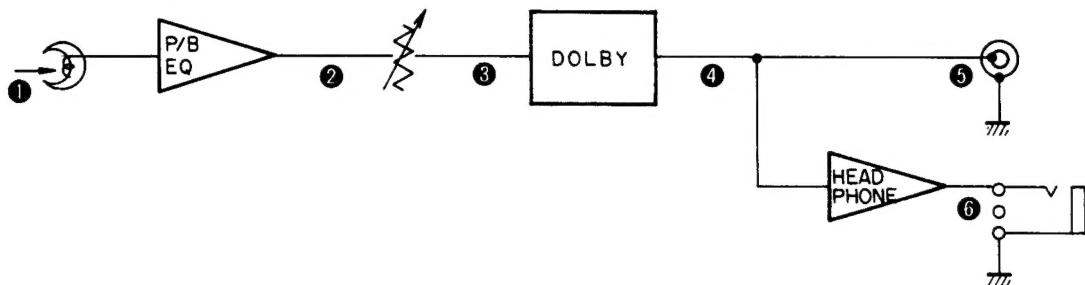


LEVEL DIAGRAM

RECORD: 1 KHz 0 dBs = 0.775 V



PLAYBACK: TEST TAPE MTT-216 315 Hz 0 dBs



ADJUSTMENT

1. Test Instruments

- AC voltmeter (High input impedance)
- Audio signal generator: AG
- Oscilloscope
- Frequency counter
- Wow and flutter meter
- Weighting filter
(ASA A characteristic with NAB curve)
- Band pass filter (Center frequency: 100 Hz, 1 kHz;
Attenuation: 18 dB/oct. or more)
- Cassette type torque gage (TW-2111: T99-0208-00)
- Spring balance
- Head demagnetizer
- Cleaning tape (T93-0014-05)

2. Test Tapes

- a) Test tapes for recording system adjustment
 - NORMAL:
MAXELL UD-XL1 (T93-0013-15)
 - CHROME (for measurement):
TDK AC-511 (T93-0010-05) or SAC-60
 - METAL: TDK AC-701 (T93-0018-00)
- b) Test tape for playback measurement
 - TEAC MTT-111 (Tape speed, azimuth) (T93-0015-00)
 - TEAC MTT-216 (Frequency characteristic) (T93-0016-00)
 - TEAC MTT-216R (Frequency characteristic) (T93-0017-00)
 - Mirror tape (T93-0021-00)

3. Notes for Adjustments and Measurements

1. **Load resistance:** A pure resistance load of 100 kΩ should be connected to the LINE OUTPUT terminal.
2. **Standard level:** 0 dBs = 0.775V
3. The electrical system should be adjusted by dividing it into playback and recording.
Adjustment of recording requires perfect performance of the playback system.
No special adjustment should be required unless inner components are replaced.

4. When the head is replaced, its stray magnetism must be completely erased by the demagnetizer prior to mounting the tape.
5. Unless otherwise designated, measurement should be carried out with the Dolby NR switch off.

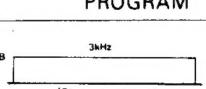
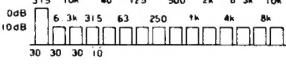
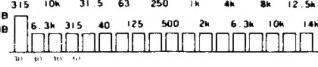
4. Meaning of Technical Word

- a) **Standard playback condition:** The state obtained by reproducing the reference level 315 Hz signal (160 pWb/mm) of the test tape and by adjusting the playback level so that the standard output level (-6 dBs = 0.3875V) can be obtained at the LINE OUTPUT terminal.
- b) **Standard recording level:** A level to obtain residual magnetic flux of 160 pWb/mm on the standard recording tape, which is 4 dB below the level 315 Hz, 0 dB (250 pWb/mm) of the test tape (MTT-216R).
- c) **Standard input level:** The standard input level necessary for obtaining the normal recording level. The levels at respective input jacks are as specified below. However 80kΩ resistor should be inserted in the input of the DIN connector in series.

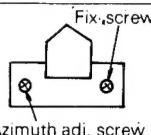
MIC INPUT	-62 dBs (0 VU)
LINE INPUT	-10 dBs (0 VU)
DIN INPUT	-24 dBs (0 VU)
- d) **Standard recording condition:** The state obtained by applying the 1 kHz signal to the LINE INPUT jack at the normal input level (-10 dBs) and by adjusting the RECORD LEVEL volume control so that recording can be carried out at the normal recording level.
- e) **Standard output level:** The standard signal level obtained at the LINE OUTPUT jack when the reference level 315 Hz signal is reproduced from the test tape.

MTT-216R 315 Hz (250 pWb/mm)	Output level: 4 dBs
MTT-216 315 Hz (160 pWb/mm)	Output level: 0 dBs

TEST TAPE SPECIFICATION

MODEL	TITLE	TIME CONSTANT	DESCRIPTION		APPLICATION
			FREQ/LEVEL	PROGRAM	
MTT-111	FLUTTER	—	3 kHz -10 dB	-10dB  (Thickness 18.5μm)	30 Min. Tape Speed Test Wow and Flutter Test
MTT-116R (MTT-216R)	FREQUENCY	1590 μs and 120 μs	40 Hz~10 kHz 0 dB/-10 dB 0 dB DIN REFERENCE LEVEL		Frequency Response Test
MTT-116U (MTT-216)	FREQUENCY	3180 μs and 120 μs	31.5 Hz~14 kHz 0 dB/-20 dB 0 dB DIN REFERENCE LEVEL -4 dB		Frequency Response Test

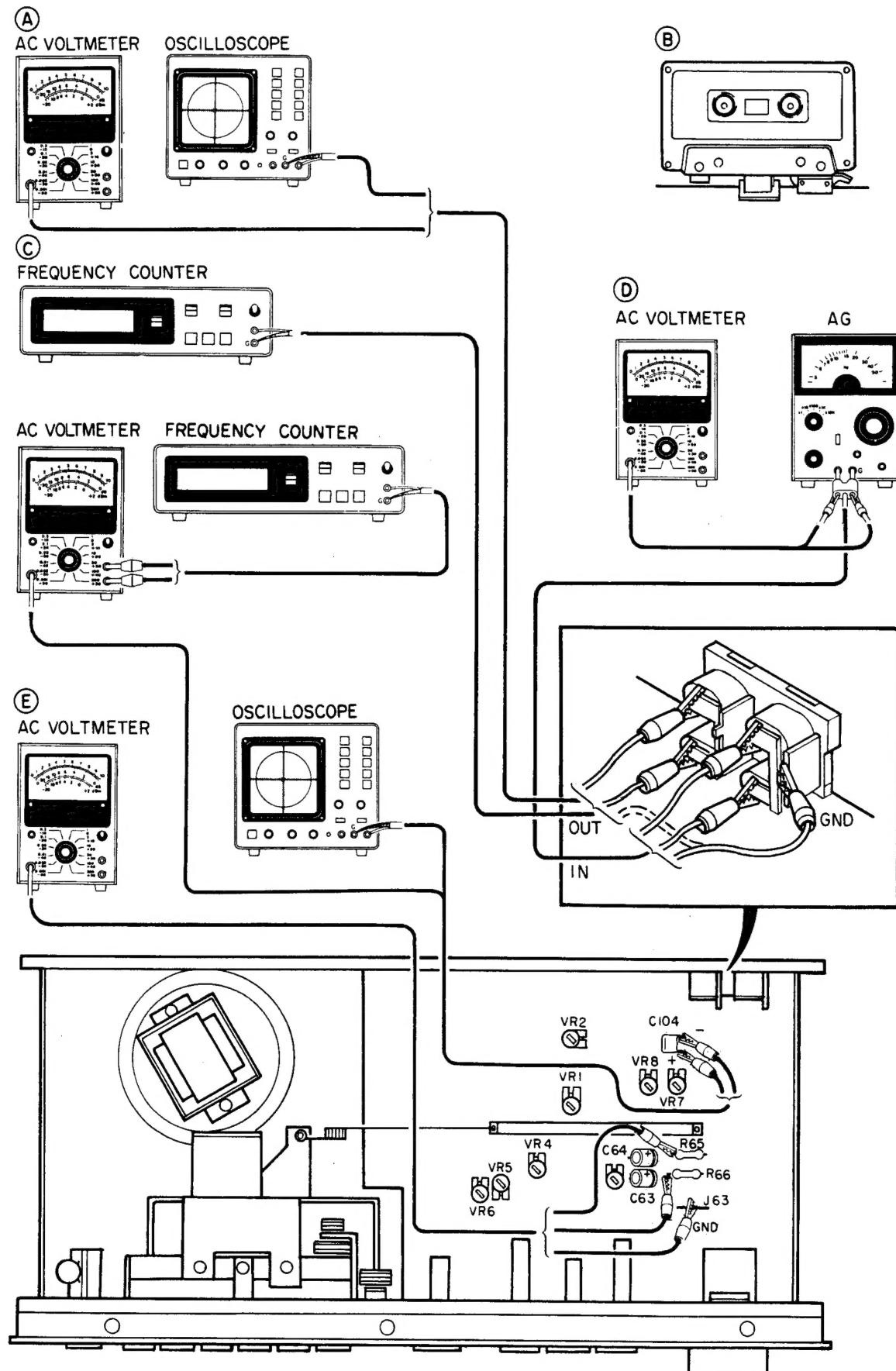
ADJUSTMENT

Step	Item	Input setup	Output setup	Cassette deck setting	Parts to be adjusted		Adjustment
					L	R	
I. Adjusting REC/PLAY head							
1.	Demagnetization and cleaning	—	—	Power: OFF	REC/PLAY HEAD erase head, capstan, pinch roller		Demagnetize the REC/PLAY head with a head demagnetizer or a cassette type demagnetizer. Clean the REC/PLAY head, erase head, capstan and pinch roller using an applicator soaked with alcohol.
2.	Fine adjustment of head azimuth	—	(A)	(B) MTT-216R.10kHz, —20dB PLAY DOLBY: OFF TAPE SEL: NORMAL			Adjust screw so that the maximum output is obtained
Check azimuth of the head again, then lock the screws with adhesive.							
II. Printed circuit board adjustment							
1.	Tape speed	—	(C)	(B) MTT-111 PLAY:	PC trimming potentiometer in the DC motor.		Adjust the PC trimming potentiometer so that the reproduced frequency becomes 3000 Hz.
2.	Playback level	—	(A)	(B) MTT-216 (MTT-116U) 315 Hz, 0 dB PLAY OUTPUT: LINE OUT DOLBY: OFF TAPE SEL: NORMAL	VR1	VR2	Adjust VR1 (VR2) so that the output of —6 dBs is obtained.
					X28-1390-**		
3.	Record current	(D) 1 kHz —10 dBs	ditto	(B) UD-XL1 REC DOLBY: OFF INPUT: LINE IN TAPE SEL: NORMAL Adjust the RECORD volume control so that the monitor output becomes —6 dBs and perform recording then playback.	VR3	VR4	Adjust VR3 (VR4) so that the playback output becomes —6 dBs. The output increases as the VRs are turned clockwise. Note: Adjusting method (E). If an output of —6 dBs cannot be obtained connect an AC voltmeter to the junction between C63 and R65 (C64 and R66). For example, when the playback output of —3.8 dBs is obtained, read the reading of the AC voltmeter with this connection during recording. Then, adjust VR3 (VR4) so that the reading of the AC voltmeter reduces by 1.2 dB. Now, the playback output is set to —6 dBs.
					X28-1390-**		
4.	Bias current	(D) 1 kHz —30 dBs 10 kHz —30 dBs	ditto	Record 1 kHz and 10 kHz consecutively with the same setting as in Step 5.	VR7	VR8	Adjust VRs so that the playback output level at 10 kHz is equal to that at 1 kHz. The bias current increases and the output level at 10 kHz drops as the VRs are turned clockwise. If the VRs are turned too much, perform Step 3, then Step 4 again.
					X28-1390-**		
5.	Peak level meter	(D) 1 kHz, —10 dBs	ditto	PAUSE: ON with other setting the same as in Step 3.	VR5	VR6	Adjust to 0 VU.
					X28-1390-**		

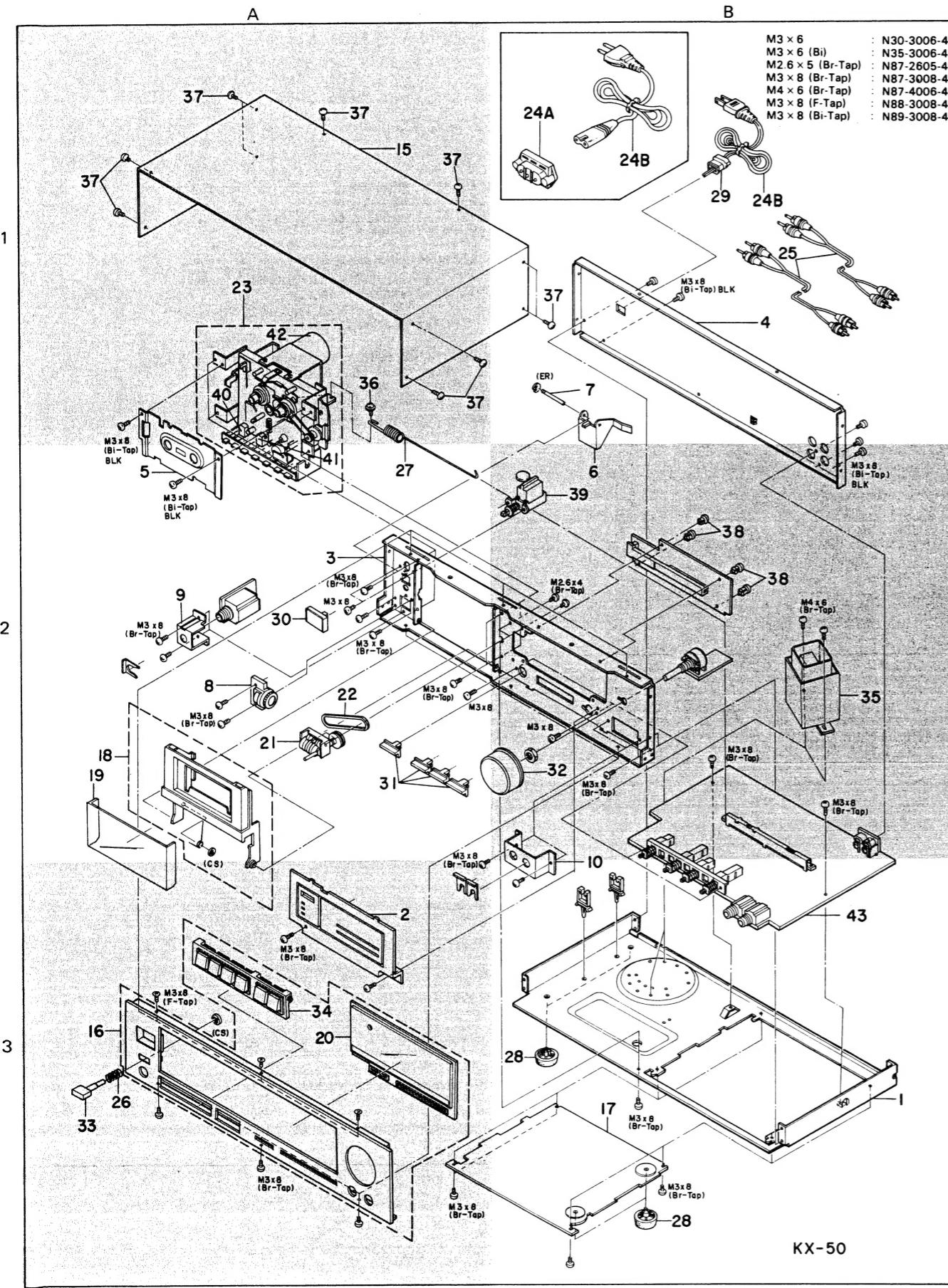
For measurements, refer to the KX-600 service manual with few modifications shown in the following.

Item	Column	For KX-50
1. Playback level (LINE OUT)	Standard and remarks	—6 dBs ±1.5 dB
9. Erase ratio	Input signal	125 Hz, —4 dBs
11. Crosstalk between tracks	Input signal	125 Hz, —10 dBs
12. Bias leak	Standard and remarks METAL	—40 dBs max.
14. Peak LED lighting level	All	Delete

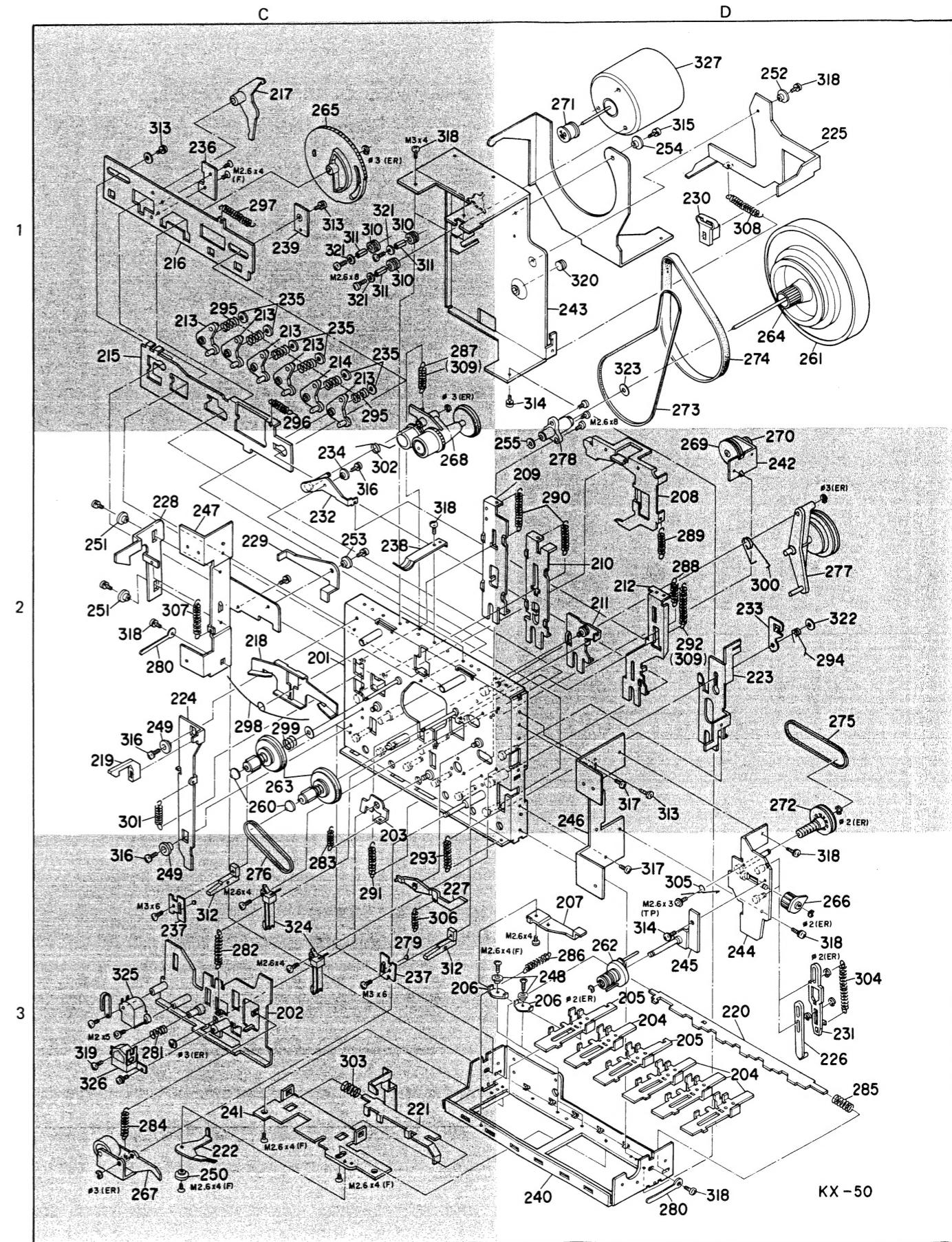
ADJUSTMENT



EXPLODED VIEW (UNIT)

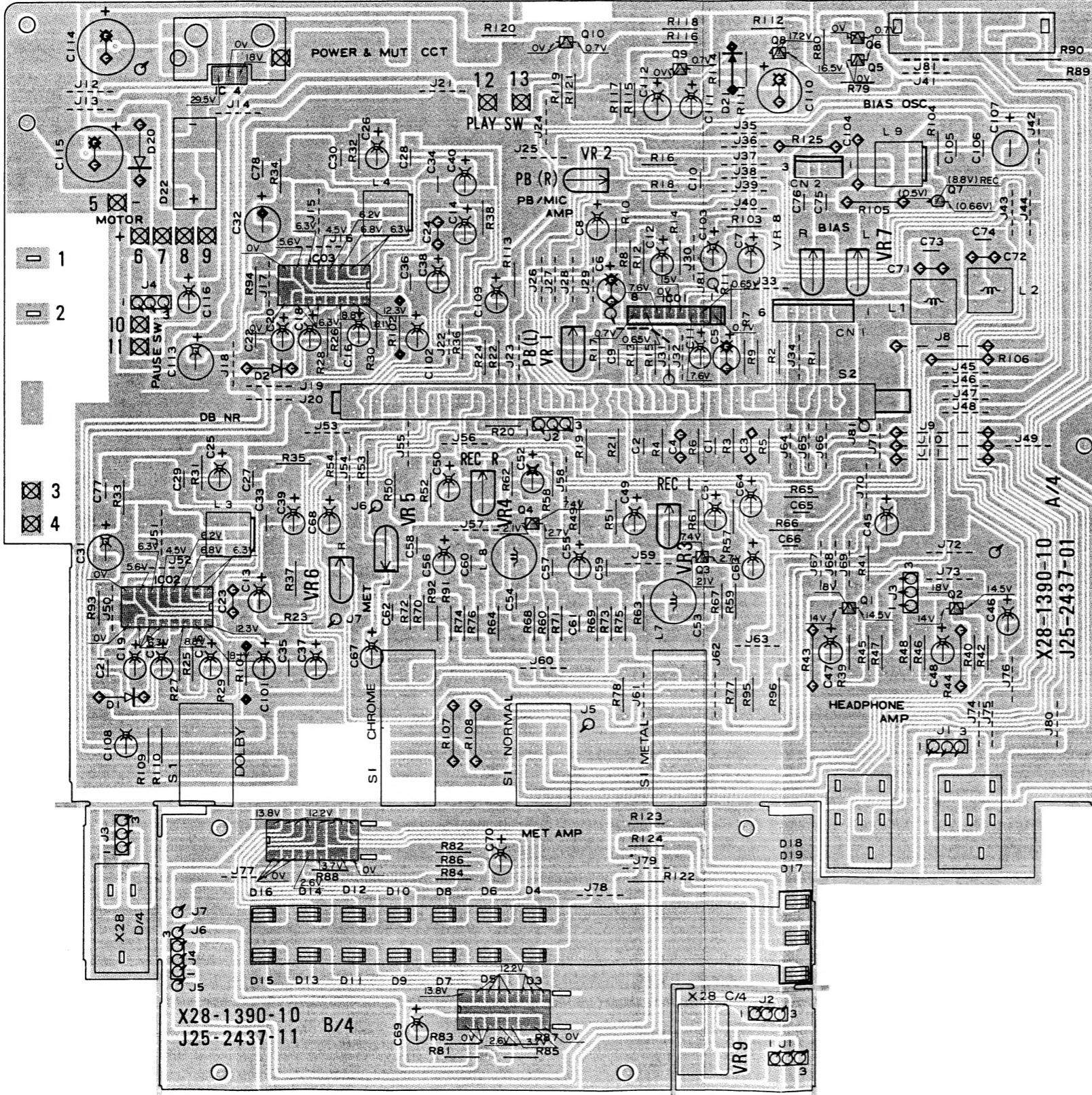


EXPLODED VIEW (MECHANISM)



PC BOARD

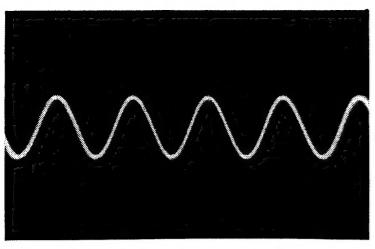
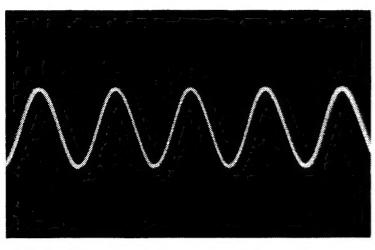
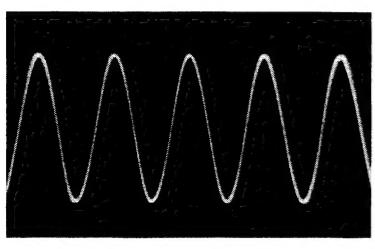
AMPLIFIER (X28-1390-**) Component Side View



IC1	: MB3106M
IC2,3	: NE646B
IC4	: μPC78M18H
IC5,6	: AN6878

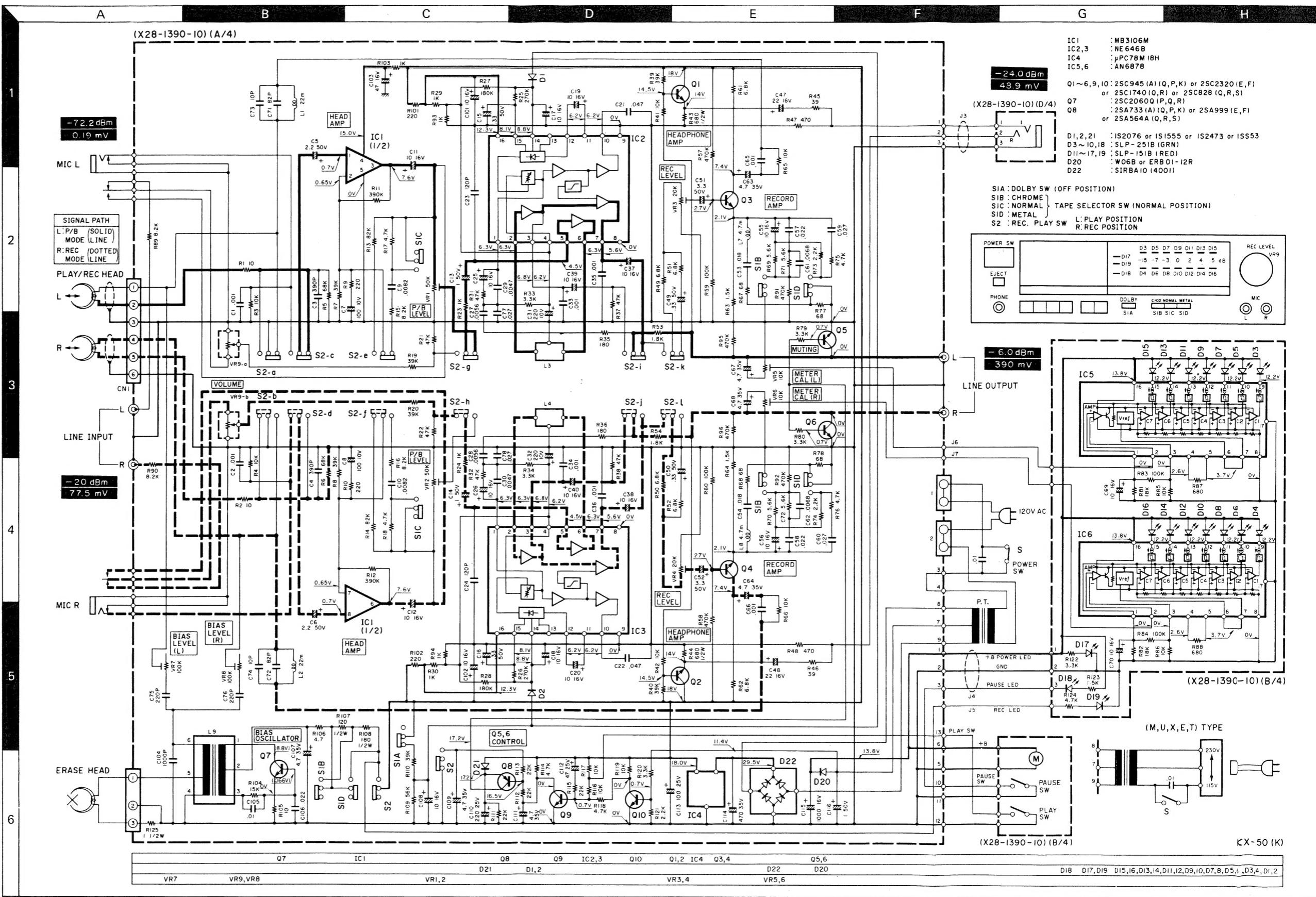
Q1~6,9,10: 2SC945 (A) (P,K) or 2SC2320 (E,F)
 or 2SC1740 (Q,R) or 2SC828 (Q,R,S)
 Q7: 2SC2060Q (P,Q,R)
 Q8: 2SA733 (A) (Q,P,K) or 2SA999 (E,F)
 or 2SA564A (Q,R,S)

D1,2,21	:IS2076 or IS1555 or IS2473 or ISS53
D3~10,18	:SLP-251B (GRN)
D11~17,19	:SLP-151B (RED)
D20	:W06B or ERB01-I2R
D22	:SIRBA10 (4001)

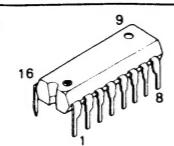
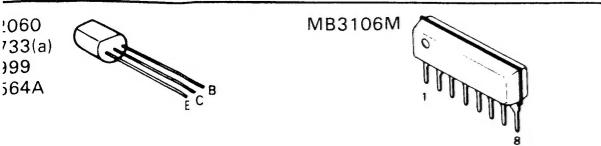
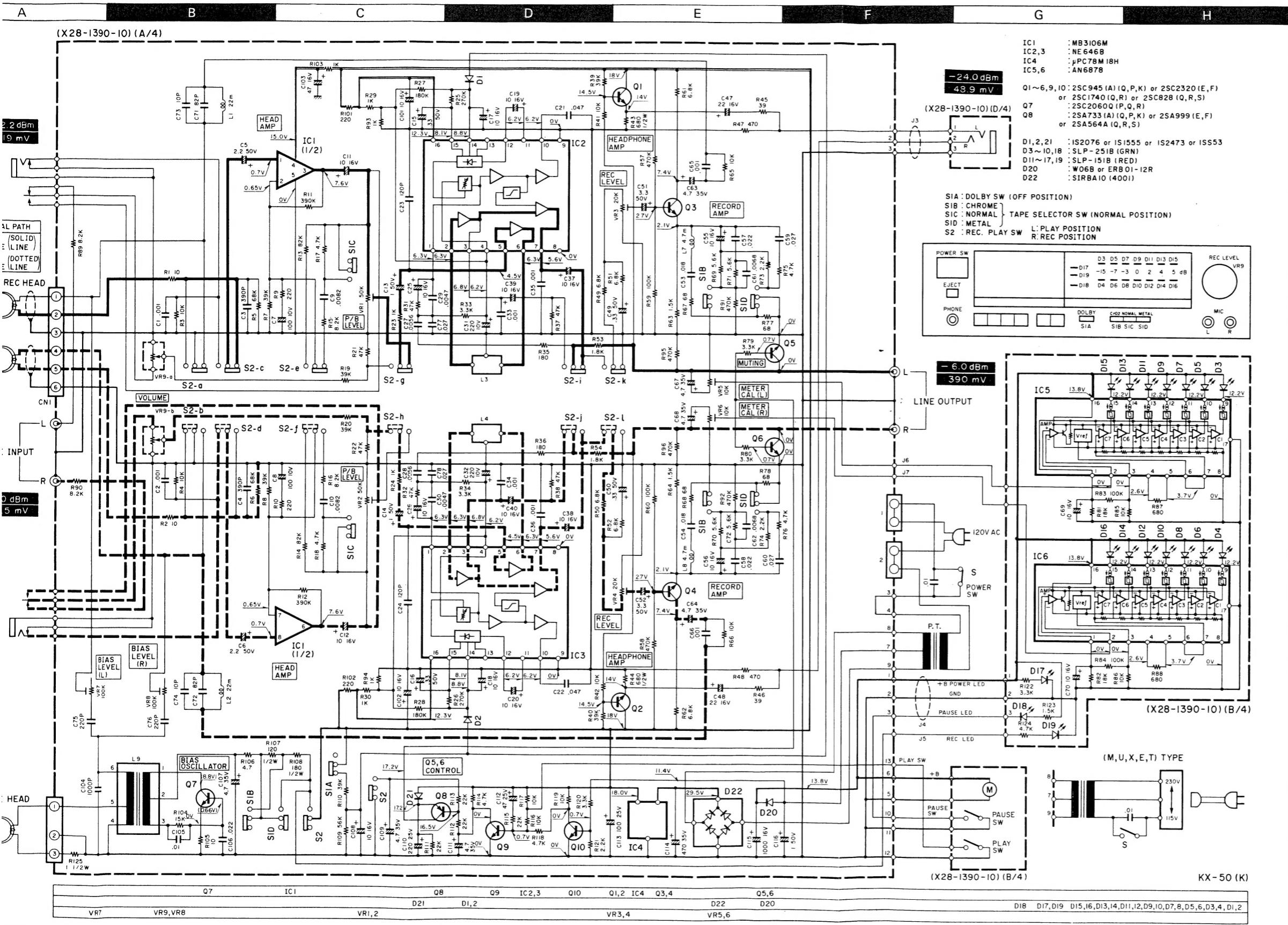
**Waveforms of Bias Oscillator
(Terminal 6 of L9)**

Normal: 5µs/cm
100V/cm

CrO₂: 5µs/cm
100V/cm

Metal: 5µs/cm
100V/cm

Semiconductor Substitutions

Name	Substitutions
NE646B μPC78M18H 2SC945(A)(Q,P,K)	NE645 LM78M18, μPA78M18 2SC2320(E,F), 2SC1740(Q,R), 2SC828(Q,R,S)
2SA733(A)(Q,P,K)	2SA999(E,F), 2SA564A(Q,R,S)
1S2076	1S1555, 1S2473, W06B
	ERB01-12R, V03C



STEREO CASSETTE DECK

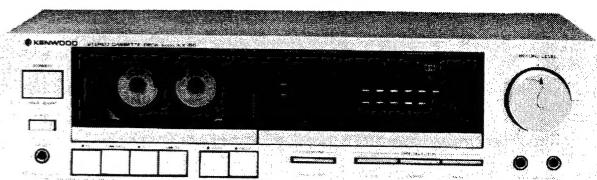


μPC78M18H
LM78M18
PA78M18

μPC78M18H
LM78M18
PA78M18

AN6878

DC voltages are measured by a VOM with 25 kΩ/V
input impedance.



SPECIFICATIONS

Front Loading Stereo Cassette Deck with Dolby NR System
Track System 4-Track, 2-Channel Stereo/Mono, Recording/Playback
Recording System AC Bias System (Bias Frequency: 105 kHz)
Erasing System AC System
Tape Speed 4.76 cm/sec (1-7/8 ips)
Heads Record and Playback Head x 1 (Hard Permalloy)
Erase Head x 1 (Ferrite)
Motor Electronically Controlled DC Motor
Fast Winding Time Approx. 105 seconds with C-60 tape
Frequency Response:
Normal Tape 20 Hz to 16,000 Hz (35 Hz to 15,000 Hz, ±3 dB)
CrO ₂ Tape 20 Hz to 16,000 Hz (35 Hz to 15,000 Hz, ±3 dB)
Metal Tape 20 Hz to 16,000 Hz (35 Hz to 15,000 Hz, ±3 dB)
Signal to Noise Ratio:
Dolby NR ON (Over 5 kHz) 67 dB (Normal and CrO ₂ Tape), 68 dB (Metal Tape)
Dolby NR OFF 57 dB (Normal and CrO ₂ Tape), 58 dB (Metal Tape)
Harmonic Distortion Less than 1.0% (at 1 kHz, 0 VU with Metal Tape)
Wow and Flutter 0.05% (W.R.M.S.)
Input Sensitivity/Impedance:
LINE x 2 77.5 mV/50 kohms
Microphones x 2 0.19 mV/10 kohms
Output Level/Load Impedance:
LINE x 2 390 mV/100 kohms
Headphones x 1 48.9 mV/8 or 16 ohms
Built-in Features:
Dolby Noise Reduction System
Three Position Tape Selector (Normal/CrO ₂ /Metal)
7-LED Peak Level Meters (-15 dB to +5 dB)
Full Auto Shut Off Mechanism in all Modes
LED Recording, Pause and Power Indicators
Timer Standby Mechanism
Three Digit Tape Counter
Two Microphone Jacks, Headphone Jack
AC 120V, 60 Hz U.S.A. and Canada Models
AC 120V/220-240V (Switchable), 50/60 Hz Other Countries
Power Requirements
Power Consumption 13.0 watts
Dimensions
W 440 mm (17-5/16")
H 119 mm (4-11/16")
D 237 mm (9-5/16")
Weight 4.5 kg (9.9 lbs)
Supplied Accessories Audio Connection Cables x 2
Head Cleaning Set x 1
Reference Tapes Normal: MAXELL XLI C-60
CrO ₂ : TDK SA C-60
Metal: TDK MA-R C-60

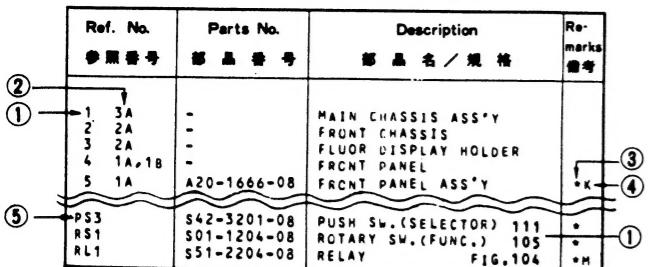
Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalt.

PARTS LIST

INSTRUCTION FOR PARTS LIST



① Exploded view drawing No.
 ② Position in exploded view.
 ③ Symbol of new parts
 ④ Area to which parts are shipped. Example: A20-1390-13 is the part No. of FRONT PANEL ASS'Y for the "K" type products (for U.S.A.). When this column is blank, it means that the same type of parts (same parts No.) are used for the products shipped to all areas.

⑤ Reference No. in schematic diagram.

⑥ Abbreviation of "ceramic capacitor".

All capacitors and resistors are listed using abbreviations.

Abbreviations

* Abbreviations of capacitors (Parts No. with initial letter "C").

ELECTRO ... Electrolytic capacitor

LL-ELEC ... Low leak electrolytic capacitor

NP-ELEC ... Non-pole electrolytic capacitor

MICA ... Mica capacitor

POLYSTY ... Polystyrene capacitor

MYLAR ... Mylar capacitor

CERAMIC ... Ceramic capacitor

TANTAL ... Tantalum capacitor

MF ... Metallized film capacitor

MP ... Metallized paper capacitor

OIL ... Oil capacitor

The unit "UF" is used in lieu of "μF"

* Abbreviations of resistors (Parts No. with initial letters "R").

RC ... Carbon composition resistor

RD ... Carbon film resistor

FL-PROOF RD ... Flame-proof carbon film resistor

RW ... Wire wound power resistor

FL-PROOF RS ... Flame-proof metal oxide film resistor

RN ... Metal film resistor

FUSE-RESIST ... Resistor with fuse function

2B ... Rated wattage 1/8W

2E ... Rated wattage 1/4W

2H ... Rated wattage 1/2W

3A ... Rated wattage 1W

3D ... Rated wattage 2W

3F ... Rated wattage 3W

3G ... Rated wattage 4W

3H ... Rated wattage 5W

All resistor values are indicated with the unit (Ω) omitted.

* Abbreviations common to capacitors and resistors.

C ... ±0.25pF (Used for capacitors only)

D ... ±0.5pF (Used for capacitors only)

F ... ±1%

G ... ±2%

J ... ±5%

K ... ±10%

M ... ±20%

Z ... +80%, -20% (Used for capacitors only)

P ... +100%, -0% (Used for capacitors only)

Resistors RD (carbon composition resistors) are not listed in the parts list. For values, refer to the schematic diagram.

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
KX-50 UNIT			
1 3B	-	MAIN CHASSIS	
2 3A	-	DRESSING PANEL	
3 2A	-	SUB PANEL	
4 1B	-	REAR PANEL	
5 2A	-	DRESSING PLATE	
6 2B	-	EJECT LEVER	
7 1B	-	SHAFT	
8 2A	-	DAMPER	
9 2A	-	MOUNT HARDWARE(PHONE)	
10 3B	-	MOUNT HARDWARE(MIC)	
15 1A	A01-0619-02	METALLIC CABINET	*
16 3A	A20-2028-03	FRONT PANEL ASS'Y	*K
16 3A	A20-2028-03	FRONT PANEL ASS'Y	PU
16 3A	A20-2028-03	FRONT PANEL ASS'Y	MX
16 3A	A20-2029-03	FRONT PANEL ASS'Y	T
16 3A	A20-2030-03	FRONT PANEL ASS'Y	E
17 3B	A40-0556-03	BOTTOM PLATE	*
18 2A	A53-0239-02	CASSETTE HOLDER ASS'Y	*
-	B46-0055-30	WARRANTY CARD	P
-	B46-0060-00	WARRANTY CARD	T
-	B46-0061-30	WARRANTY CARD	K
-	B46-0062-30	WARRANTY CARD	U
-	B46-0063-13	WARRANTY CARD	U
-	B46-0064-20	WARRANTY CARD	X
-	B50-2457-00	INSTRUCTION MANUAL	*
-	B50-2458-00	INSTRUCTION MANUAL	*K
-	B50-2458-00	INSTRUCTION MANUAL	U
-	B50-2459-00	INSTRUCTION MANUAL	P
-	B50-2459-00	INSTRUCTION MANUAL	MX
-	B50-2459-00	INSTRUCTION MANUAL	M*
-	B50-2459-00	INSTRUCTION MANUAL	E*
-	B50-2459-00	INSTRUCTION MANUAL	T*
-	B50-2459-00	SERVICE STATIONS'LIST	U
19 2A	B10-0523-03	CASSETTE DOOR GLASS	*
20 3A	B10-0526-03	FRONT GLASS ASS'Y	*
21 2A	B35-0213-05	COUNTER	*
22 2A	D16-0226-04	BELT	
23 1A	D40-0519-05	MECHANISM ASS'Y	*
24A 1B	E03-0102-05	3P INLET	UM
24A 1B	E03-0102-05	3P INLET	XE
24A 1B	E03-0102-05	3P INLET	T
24B 1B	E30-0181-05	POWER CORD	KP
24B 1B	E30-1305-15	POWER CORD	UM
24B 1B	E30-1328-05	POWER CORD	T
24B 1B	E30-1329-05	POWER CORD	EX
24B 1B	E30-1342-05	POWER CORD	X
25 1B	E30-0505-05	AUDIO CORD	*
26 3A	G01-1080-04	COILED SPRING(EJECT)	
27 2A	G01-1082-04	SPRING(REC/PLAY SW.)	
-	H01-2471-04	CARTON BOX	K
-	H01-2471-04	CARTON BOX	PU
-	H01-2471-04	CARTON BOX	MX
-	H01-2471-04	CARTON BOX	E
-	H01-2474-04	CARTON BOX	T
-	H10-2296-02	POLYSTYRENE FIXTURE	*
-	H20-1107-04	COVER	K
-	H20-1107-04	COVER	PU
-	H20-1107-04	COVER	XE
-	H20-1107-04	COVER	T

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
KX-50 UNIT			
-	H20-1109-04	COVER	*M
-	H25-0078-04	BAG	
28 3B	J02-0343-05	FOOT X4	
29 1B	J42-0083-05	BUSHING(POWER CORD)	*K
29 1B	J42-0083-05	BUSHING(POWER CORD)	P
30 2A	K27-0199-04	PUSH BUTTON(POWER)	*
31 2A	K27-0337-04	PUSH BUTTON(DOLBY,SEL)	*
32 2B	K29-0385-04	KNOB(REC LEVEL)	*
33 3A	K29-0931-04	PUSH BUTTON(EJECT)	*
34 3A	K29-0935-13	PUSH BUTTON ASSY	*
35 2B	L01-6411-05	POWER TRANSFORMER	*K
35 2B	L01-6411-05	POWER TRANSFORMER	P
35 2B	L01-6414-15	POWER TRANSFORMER	*U
35 2B	L01-6414-15	POWER TRANSFORMER	MX
35 2B	L01-6444-05	POWER TRANSFORMER	ET
36 1A	N09-0287-05	SCREW M3X8	*
37 1A,1B	N09-0373-05	SCREW M3X6(BI-TAP)SLV	*
38 2B	N29-0035-05	PUSH RIVET(LED)	*
39 2B	S40-1035-05	PUSH SWITCH(POWER)	*K
39 2B	S40-1035-05	PUSH SWITCH(POWER)	P
39 2B	S40-1037-05	PUSH SWITCH(POWER)	*U
39 2B	S40-1037-05	PUSH SWITCH(POWER)	MX
39 2B	S40-1037-05	PUSH SWITCH(POWER)	ET
40 1A	T32-0010-05	ERASE HEAD	*
41 2A	T34-0016-05	REC/PLAYBACK HEAD	*
42 1A	T42-0108-05	DC MOTOR	*
-	W01-0301-05	HEAD CLEANING SWAB	
43 2B,3B	X28-1390-10	AMPLIFIER PC BOARD ASSY	*K
43 2B,3B	X28-1390-10	AMPLIFIER PC BOARD ASSY	P
43 2B,3B	X28-1390-81	AMPLIFIER PC BOARD ASSY	*U
43 2B,3B	X28-1390-81	AMPLIFIER PC BOARD ASSY	MX
43 2B,3B	X28-1390-81	AMPLIFIER PC BOARD ASSY	ET
AMPLIFIER (X28-1390-**)			
D3 -10	B30-0275-05	LED(GREEN)	
D11 -17	B30-0274-05	LED(RED)	
D18	B30-0275-05	LED(GREEN)	
D19	B30-0274-05	LED(RED)	
C1 -2	C45-1710-25	MYLAR 0.001UF	J
C2 -4	C52-1739-16	CERAMIC 390PF	K
C5 -6	C25-6522-57	LL-ELEC 2.2UF	35WV
C7 -8	C24-1010-79	ELECTRO 100UF	10WV
C9 -10	C45-1782-25	MYLAR 0.0082UF	J
C11 -12	C24-1210-69	ELECTRO 10UF	16WV
C13 -14	C26-1710-57	NP-ELEC 1UF	50WV
C15 -16	C25-1733-47	LL-ELEC 0.33UF	50WV
C17 -18	C25-1710-47	LL-ELEC 0.1UF	50WV
C19 -20	C24-1210-69	ELECTRO 10UF	16WV
C21 -22	C45-1747-35	MYLAR 0.047UF	J
C23 -24	C65-1712-15	CERAMIC 120PF	J
C25 -26	C24-1210-69	ELECTRO 10UF	16WV
C27 -28	C45-1756-25	MYLAR 0.0056UF	J
C29 -30	C45-1747-25	MYLAR 0.0047UF	J
C31 -32	C24-1022-		

PARTS LIST

Ref. No.	Parts No.	Description	Re-marks
参照番号	部品番号	部品名 / 規格	備考
KX-50 UNIT			
1 3B	-	MAIN CHASSIS	
2 3A	-	DRESSING PANEL	
3 2A	-	SUB PANEL	
4 1B	-	REAR PANEL	
5 2A	-	DRESSING PLATE	
6 2B	-	EJECT LEVER	
7 1B	-	SHAFT	
8 2A	-	DAMPER	
9 2A	-	OUNT HARDWARE(PHONE)	
10 3B	-	OUNT HARDWARE(MIC)	
15 1A	A01-0619-02	METALLIC CABINET	*K
16 3A	A20-2028-03	FRONT PANEL ASSY	*K
16 3A	A20-2028-03	FRONT PANEL ASSY	PU
16 3A	A20-2028-03	FRONT PANEL ASSY	MX
16 3A	A20-2029-03	FRONT PANEL ASSY	*T
16 3A	A20-2030-03	FRONT PANEL ASSY	*E
17 3B	A40-0556-03	BOTTOM PLATE	**
18 2A	A53-0239-02	CASSETTE HOLDER ASSY	*
-	B46-0055-30	WARRANTY CARD	P
-	B46-0060-00	WARRANTY CARD	T
-	B46-0061-30	WARRANTY CARD	K
-	B46-0062-30	WARRANTY CARD	U
-	B46-0063-13	WARRANTY CARD	U
-	B46-0064-20	WARRANTY CARD	X
-	B50-2457-00	INSTRUCTION MANUAL	*K
-	B50-2458-00	INSTRUCTION MANUAL	U
-	B50-2458-00	INSTRUCTION MANUAL	*P
-	B50-2459-00	INSTRUCTION MANUAL	MX
-	B50-2459-00	INSTRUCTION MANUAL	*M
-	B50-2460-00	INSTRUCTION MANUAL	*E
-	B50-2461-00	INSTRUCTION MANUAL	*T
-	B50-2462-00	INSTRUCTION MANUAL	U
-	B59-0018-00	SERVICE STATIONS'LIST	U
AMPLIFIER (X28-1390-**)			
19 2A	B10-0523-03	CASSETTE DOOR GLASS	*
20 3A	B10-0526-03	FRONT GLASS ASSY	*
21 2A	B35-0213-05	COUNTER	*
22 2A	D16-0226-04	BELT	
23 1A	D40-0519-05	MECHANISM ASSY	*
24A 1B	E03-0102-05	3P INLET	UM
24A 1B	E03-0102-05	3P INLET	XE
24A 1B	E03-0102-05	3P INLET	T
24B 1B	E30-0181-05	POWER CORD	KP
24B 1B	E30-1305-15	POWER CORD	UM
24B 1B	E30-1328-05	POWER CORD	T
24B 1B	E30-1329-05	POWER CORD	XE
24B 1B	E30-1342-05	POWER CORD	X
25 1B	E30-0505-05	AUDIO CORD	*
26 3A	G01-1080-04	COILED SPRING(EJECT)	
27 2A	G01-1082-04	SPRING(REC/PLAY SW.)	
-	H01-2471-04	CARTON BOX	K
-	H01-2471-04	CARTON BOX	PU
-	H01-2471-04	CARTON BOX	MX
-	H01-2471-04	CARTON BOX	E
-	H01-2474-04	CARTON BOX	T
-	H10-2296-02	POLYSTYRENE FIXTURE	*
-	H20-1107-04	COVER	K
-	H20-1107-04	COVER	PU
-	H20-1107-04	COVER	XE
-	H20-1107-04	COVER	T

Ref. No.	Parts No.	Description	Re-marks
参照番号	部品番号	部品名 / 規格	備考
KX-50 UNIT			
-	H20-1109-04	COVER	*M
-	H25-0078-04	BAG	
28 3B	J02-0343-05	FOOT X4	
29 1B	J42-0083-05	BUSHING(POWER CORD)	*K
29 1B	J42-0083-05	BUSHING(POWER CORD)	P
30 2A	K27-0199-04	PUSH BUTTON(POWER)	*
31 2A	K27-0337-04	PUSH BUTTON(DOLBY,SEL)	*
32 2B	K29-0385-05	KNOB(REC LEVEL)	*
33 3A	K29-0931-04	PUSH BUTTON(EJECT)	*
34 3A	K29-0935-13	PUSH BUTTON ASSY	*
35 2B	L01-6411-05	POWER TRANSFORMER	*K
35 2B	L01-6411-05	POWER TRANSFORMER	P
35 2B	L01-6414-15	POWER TRANSFORMER	*U
35 2B	L01-6444-05	POWER TRANSFORMER	MX
36 1A	N09-0287-05	SCREW M3X8	*
37 1A,1B	N09-0373-05	SCREW M3X6(61-TAP)SLV	*
38 2B	N29-0035-05	PUSH RIVET(LED)	
39 2B	S40-1035-05	PUSH SWITCH(POWER)	*K
39 2B	S40-1035-05	PUSH SWITCH(POWER)	P
39 2B	S40-1037-05	PUSH SWITCH(POWER)	*U
39 2B	S40-1037-05	PUSH SWITCH(POWER)	MX
39 2B	S40-1037-05	PUSH SWITCH(POWER)	ET
40 1A	T32-0010-05	ERASE HEAD	*
41 2A	T34-0016-05	REC/PLAYBACK HEAD	*
42 1A	T42-0108-05	DC MOTOR	*
-	W01-0301-05	HEAD CLEANING SWAB	
43 2B,3B	X28-1390-10	AMPLIFIER PC BOARD ASSY	*K
43 2B,3B	X28-1390-10	AMPLIFIER PC BOARD ASSY	P
43 2B,3B	X28-1390-81	AMPLIFIER PC BOARD ASSY	*U
43 2B,3B	X28-1390-81	AMPLIFIER PC BOARD ASSY	MX
43 2B,3B	X28-1390-81	AMPLIFIER PC BOARD ASSY	ET
AMPLIFIER (X28-1390-**)			
D3 -10	B30-0275-05	LED(GREEN)	
D11 -17	B30-0274-05	LED(RED)	
D18	B30-0275-05	LED(GREEN)	
D19	B30-0274-05	LED(RED)	
C1 ,2	C45-1710-25	MYLAR 0.001UF J	
C2 ,4	C52-1739-16	CERAMIC 390PF K	
C5 ,6	C25-6522-57	LL-ELEC 2.2UF 35WV	
C7 ,8	C24-1010-79	ELECTRO 100UF 10WV	
C9 ,10	C45-1782-25	MYLAR 0.0082UF J	
C11 ,12	C24-1210-69	ELECTRO 10UF 16WV	
C13 ,14	C26-1710-57	NP-ELEC 1UF 50WV	
C15 ,16	C25-1733-47	LL-ELEC 0.33UF 50WV	
C17 ,18	C25-1710-47	LL-ELEC 0.1UF 50WV	
C19 ,20	C24-1210-69	ELECTRO 10UF 16WV	
C21 ,22	C45-1747-35	MYLAR 0.047UF J	
C23 ,24	C65-1712-15	CERAMIC 120PF J	
C25 ,26	C24-1210-69	ELECTRO 10UF 16WV	
C27 ,28	C45-1756-25	MYLAR 0.0056UF J	
C29 ,30	C45-1747-25	MYLAR 0.0047UF J	
C31 ,32	C24-1022-71	ELECTRO 220UF 10WV	
C33 ,36	C45-1710-25	MYLAR 0.001UF J	
C37 ,40	C24-1210-69	ELECTRO 10UF 16WV	
C45 ,46	C24-1210-69	ELECTRO 10UF 16WV	
C47 ,48	C24-1222-61	ELECTRO 22UF 16WV	
C49 ,50	C25-1733-47	LL-ELEC 0.33UF 50WV	
C51 ,52	C25-1733-57	LL-ELEC 3.3UF 50WV	
C53 ,54	C45-1718-35	MYLAR 0.018UF J	

Ref. No.	Parts No.	Description	Re-marks
参照番号	部品番号	部品名 / 規格	備考
C55 ,56	C24-1210-69	ELECTRO 10UF 16WV	
C57 ,58	C45-1722-35	MYLAR 0.022UF J	
C59 ,60	C45-1727-35	MYLAR 0.027UF J	
C61 ,62	C45-1768-25	MYLAR 0.0068UF J	
C63 ,64	C24-6547-57	ELECTRO 4.7UF 35WV	
C65 ,66	C45-1710-25	MYLAR 0.001UF J	
C67 ,68	C24-6547-57	ELECTRO 4.7UF 35WV	
C69 ,70	C24-1210-69	ELECTRO 10UF 16WV	
C71 ,72	C71-1782-05	CERAMIC 82PF J	
C73 ,74	C71-1710-02	CERAMIC 10PF D	
C75 ,76	C71-1722-15	CERAMIC 220PF J	
C77 ,78	C45-1727-35	MYLAR 0.027UF J	
C101 ,102	C24-1210-69	ELECTRO 10UF 16WV	
C103	C24-1247-61	ELECTRO 47UF 16WV	
C104	C91-0343-05	MYLAR 0.001UF 630WV	*
C105	C45-1710-35	MYLAR 0.01UF J	
C106	C45-1722-35	MYLAR 0.022UF J	
C107	C24-6547-57	ELECTRO 4.7UF 35WV	
C108	C24-1210-69	ELECTRO 10UF 16WV	
C109	C24-6547-57	ELECTRO 4.7UF 35WV	
C110	C24-1422-71	ELECTRO 220UF 25WV	
C111	C24-6547-57	ELECTRO 4.7UF 35WV	
C112	C24-1447-61	ELECTRO 47UF 25WV	
C113	C24-1410-71	ELECTRO 100UF 25WV	
C114	C24-6547-71	ELECTRO 470UF 35WV	
C114	C24-6547-71	ELECTRO 470UF 35WV	
C115	C24-1210-81	ELECTRO 1000UF 16WV	
C116	C26-1710-57	NP-ELEC 1UF 50WV	
101 ,3B	E11-0320-05	PHONE JACK(MICROPHONES)	*
102 ,2A</			